

## PATENT APPLICATION

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Jingkuang CHEN et al.

Group Art Unit: 2813

Application No.: 09/683,857

Examiner:

D. Hogans

Filed: February 22, 2002

Docket No.:

111517

SYSTEMS AND METHODS FOR INTEGRATION OF HETEROGENEOUS CIRCUIT

**DEVICES** 

## RESPONSE TO RESTRICTION AND ELECTION OF SPECIES REQUIREMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In reply to the October 21, 2003 Restriction and Election of Species Requirement, Applicants provisionally elect Group I, claims 1-16 and 29-38 drawn to a method, and Species I. Claims 1-16 are readable on the elected Species.

It is respectfully submitted that the subject matter of at least claims 29-38, corresponding to Group I, Species II, should be examined with the elected Species The Office Action fails to set forth a proper basis for requiring an election between the claims Group I, Species I and the claims of Group I, Species II. The Office Action cites Applicants specification at page 3, paragraphs [0015] and [0016]. However, this does not establish that the claims are directed to different species. These paragraphs merely refer to "various exemplary embodiments" of the methods of the invention.

Applicants' point out that the exemplary embodiments of this invention are described with respect to an exemplary method as outlined in Figs. 2-32, which exemplifies both paragraphs [0015] and [0016]. As stated in MPEP §806.04(e), "[c]laims may be restricted to a single disclosed embodiment (i.e., a single species, and thus be designated a *specific species* claim)." It is respectfully submitted that citation of these two paragraphs does not provide a proper basis for requiring election.

Thus, withdrawal of the Election of Species Requirement is respectfully requested.

The Office Action states that the basis for the restriction requirement is that the product can be made by a another and materially different process, "such as, the high voltage wells and the low voltage wells or the plurality of heterogeneous circuit devices may be created by thermal diffusion versus ion implantation." Applicants respectfully disagree.

The Office Action does not state a materially different process by which high and low voltage wells may be formed. Ion implantation and thermal diffusion are <u>not</u> alternative methods as suggested by the Office Action. On the contrary, thermal diffusion may be part of an ion implantation process that forms high and low voltage wells. Ions may be implanted and then "driven" by thermal diffusion or ions may be implanted and "driven" by ion implantation alone. As described in U.S. Patent No. 6,649,963, for example, ions may be implanted into the surface of a substrate, followed by a thermal diffusion step. (Col. 3, lns. 41-45) In other words, thermal diffusion alone cannot create high voltage wells and low voltage wells or a plurality of heterogeneous circuit devices as asserted by the Office Action. Therefore, it is respectfully submitted that the basis for restriction stated in the Office Action is in error and improper.

It is also respectfully submitted that the subject matter of all claims 1-46 is sufficiently related that a thorough search for the subject matter of any one Group of claims would encompass a search for the subject matter of the remaining claims. Thus, it is respectfully submitted that the search and examination of the entire application could be made without serious burden. See MPEP §803 in which it is stated that "if the search and examination of an entire application can be made without serious burden, the examiner <u>must</u> examine it on the merits, even though it includes claims to independent or distinct inventions" (emphasis added). It

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is respectfully submitted that this policy should apply in the present application in order to avoid unnecessary delay and expense to Applicants and duplicative examination by the Patent Office.

Thus, withdrawal of the Restriction Requirement is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-46 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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Date: November 20, 2003

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